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## RAW SEQUENCE LISTING

DATE: 01/16/2002

PATENT APPLICATION: US/09/938,114

TIME: 09:13:45

Input Set : N:\Crf3\RULE60\09938114.txt

Output Set: N:\CRF3\01162002\I938114.raw

## SEQUENCE LISTING

## 4 (1) GENERAL INFORMATION:

7 (i) APPLICANT: Chun Wang, Benjamin XY Li, Xin Cheng,  
 8 Jing Liu, Li-Wen Niu, Wan-Zhi Huang,  
 9 Zhen-Yu Xu, Dan Luo, Lian-Di Kang,  
 10 Jin-Guo Ding, Fang Rong, Yan Liu and  
 11 Hui-Ran Chen

15 (ii) TITLE OF INVENTION: AN ANTITHROMBOSIS ENZYME FROM THE SNAKE  
 16 VENOM OF AGKISTRODON ACUTUS

19 (iii) NUMBER OF SEQUENCES: 12

22 (iv) CORRESPONDENCE ADDRESS:

24 (A) ADDRESSEE: Lyon &amp; Lyon

25 (B) STREET: 633 West Fifth Street  
 26 Suite 4700

27 (C) CITY: Los Angeles

28 (D) STATE: California

29 (E) COUNTRY: U.S.A.

30 (F) ZIP: 90071-2066

33 (v) COMPUTER READABLE FORM:

35 (A) MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
 36 storage

37 (B) COMPUTER: IBM Compatible

38 (C) OPERATING SYSTEM: IBM P.C. DOS 5.0

39 (D) SOFTWARE: FastSEQ for Windows 2.0

42 (vi) CURRENT APPLICATION DATA:

C--&gt; 44 (A) APPLICATION NUMBER: US/09/938,114

C--&gt; 45 (B) FILING DATE: 23-Aug-2001

46 (C) CLASSIFICATION:

49 (vii) PRIOR APPLICATION DATA:

51 (A) APPLICATION NUMBER: 09/058,740

52 (B) FILING DATE:

55 (viii) ATTORNEY/AGENT INFORMATION:

57 (A) NAME: Chen, Anthony C.

58 (B) REGISTRATION NUMBER: 38,673

59 (C) REFERENCE/DOCKET NUMBER: 233/298

65 (ix) TELECOMMUNICATION INFORMATION:

67 (A) TELEPHONE: (213) 489-1600

68 (B) TELEFAX: (213) 955-0440

69 (C) TELEX: 67-3510

72 (2) INFORMATION FOR SEQ ID NO: 1:

74 (i) SEQUENCE CHARACTERISTICS:

76 (A) LENGTH: 544 base pairs

77 (B) TYPE: nucleic acid

78 (C) STRANDEDNESS: single

79 (D) TOPOLOGY: linear

81 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

83 GAAGGGCATT GCTACAAGGT CTTCAAACAA TCTAAGACCT GGACAGATGC AGAGAGCTTC

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ENTERED

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84 TGCACGAAGC AGGTGAACGG GGGGCATCTG GTCTCTATCG AAAGCTCCGG AGAAGCAGAC 120
85 TTTGTGGGCC AGTTGATTGC TCAGAAGATA AAGTCAGCCA AAATCCATGT CTGGATCGGA 180
86 CTGAGGGGCTC AAAACAAAGA AAAGCAATGC AGCATAGAGT GGAGCGATGG CTCCAGCATC 240
87 AGTTATGAGA ATTGGATTGA AGAAGAATCC AAAAAGTGTC TTGGGGTGCA CATAGAGACA 300
88 GGGTTTCATA AGTGGGAGAA TTTTACTGT GAACAACAAG ATCCTTTTGT CTGCGAGGCA 360
89 TAGTCTGAAG ATCCAGCTGA TTGAAGTCTG GAGAAGCAAG GAAGCCCCC ACCCCATCCC 420
90 CCAACCCTGC CTAGCCACAA TCTCTGCTAT GCACCCTTTG CTCAACGGAT GCTCTCTGTA 480
91 GCTGGATCTG GTGTTGCTGC TCCTGATGGG CCGGAAGTCA ATAAATTCTG CCTAGCCTGA 540
92 AAAA 544

```

## 96 (2) INFORMATION FOR SEQ ID NO: 2:

## 98 (i) SEQUENCE CHARACTERISTICS:

100 (A) LENGTH: 129 amino acids

101 (B) TYPE: amino acid

102 (C) STRANDEDNESS: single

103 (D) TOPOLOGY: linear

## 105 (ii) MOLECULE TYPE: Peptide

## 107 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

```

109 Asp Cys Ser Ser Asp Trp Ser Ser Tyr Glu Gly His Cys Tyr Lys Val
110 1 5 10 15
112 Phe Lys Gln Ser Lys Thr Trp Thr Asp Ala Glu Ser Phe Cys Thr Lys
113 20 25 30
115 Gln Val Asn Gly Gly His Leu Val Ser Ile Glu Ser Ser Gly Glu Ala
116 35 40 45
118 Asp Phe Val Gly Gln Leu Ile Ala Gln Lys Ile Lys Ser Ala Lys Ile
119 50 55 60
121 His Val Trp Ile Gly Leu Arg Ala Gln Asn Lys Glu Lys Gln Cys Ser
122 65 70 75 80
124 Ile Glu Trp Ser Asp Gly Ser Ser Ile Ser Lys Glu Asn Trp Ile Glu
125 85 90 95
127 Glu Glu Ser Lys Lys Cys Leu Gly Val His Ile Glu Thr Gly Phe His
128 100 105 110
130 Lys Trp Glu Asn Phe Tyr Cys Glu Gln Gln Asp Pro Phe Val Cys Glu
131 115 120 125
133 Ala

```

## 137 (2) INFORMATION FOR SEQ ID NO: 3:

## 139 (i) SEQUENCE CHARACTERISTICS:

141 (A) LENGTH: 29 amino acids

142 (B) TYPE: amino acid

143 (C) STRANDEDNESS: single

144 (D) TOPOLOGY: linear

## 146 (ii) MOLECULE TYPE: Peptide

## 148 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

```

150 Asp Cys Ser Ser Asp Trp Ser Ser Tyr Glu Gly His Cys Tyr Lys Val
152 1 5 10 15
154 Phe Lys Gln Ser Lys Thr Trp Thr Asp Ala Glu Ser Phe
155 20 25

```

## 159 (2) INFORMATION FOR SEQ ID NO: 4:

## 161 (i) SEQUENCE CHARACTERISTICS:

163 (A) LENGTH: 17 amino acids

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```

164          (B) TYPE: amino acid
165          (C) STRANDEDNESS: single
166          (D) TOPOLOGY: linear
168      (ii) MOLECULE TYPE: Peptide
170      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
172  Asp Cys Pro Ser Glu Trp Ser Ser Tyr Glu Gly Phe Cys Tyr Lys Pro
173    1          5          10          15
175  Phe
179 (2) INFORMATION FOR SEQ ID NO: 5:
181      (i) SEQUENCE CHARACTERISTICS:
183          (A) LENGTH: 23 amino acids
184          (B) TYPE: amino acid
185          (C) STRANDEDNESS: single
186          (D) TOPOLOGY: linear
188      (ii) MOLECULE TYPE: Peptide
190      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
192  Met Gly Arg Phe Ile Phe Val Ser Phe Gly Leu Leu Val Val Phe Leu
193    1          5          10          15
195  Ser Leu Ser Gly Thr Ala Ala
196          20
200 (2) INFORMATION FOR SEQ ID NO: 6:
202      (i) SEQUENCE CHARACTERISTICS:
204          (A) LENGTH: 6 amino acids
205          (B) TYPE: amino acid
206          (C) STRANDEDNESS: single
207          (D) TOPOLOGY: linear
209      (ii) MOLECULE TYPE: Peptide
211      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
213  Tyr Glu Gly His Cys Tyr
214    1          5
218 (2) INFORMATION FOR SEQ ID NO: 7:
220      (i) SEQUENCE CHARACTERISTICS:
222          (A) LENGTH: 20 base pairs
223          (B) TYPE: nucleic acid
224          (C) STRANDEDNESS: single
225          (D) TOPOLOGY: linear
227      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
229  TATGAAGGGC ATGCTACAA
233 (2) INFORMATION FOR SEQ ID NO: 8:
235      (i) SEQUENCE CHARACTERISTICS:
237          (A) LENGTH: 20 base pairs
238          (B) TYPE: nucleic acid
239          (C) STRANDEDNESS: single
240          (D) TOPOLOGY: linear
242      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
244  CCATGGGGCG ATTCATCTTC
248 (2) INFORMATION FOR SEQ ID NO: 9:
250      (i) SEQUENCE CHARACTERISTICS:
252          (A) LENGTH: 19 base pairs

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```
253         (B) TYPE: nucleic acid
254         (C) STRANDEDNESS: single
255         (D) TOPOLOGY: linear
259     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
261 CAGCTGCATC TTCAGACTA                                     19
265 (2) INFORMATION FOR SEQ ID NO: 10:
267     (i) SEQUENCE CHARACTERISTICS:
269         (A) LENGTH: 24 base pairs
270         (B) TYPE: nucleic acid
271         (C) STRANDEDNESS: single
272         (D) TOPOLOGY: linear
274     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
276 GGTGGCGACG ACTCCTGGAG CCCG                               24
280 (2) INFORMATION FOR SEQ ID NO: 11:
282     (i) SEQUENCE CHARACTERISTICS:
284         (A) LENGTH: 24 base pairs
285         (B) TYPE: nucleic acid
286         (C) STRANDEDNESS: single
287         (D) TOPOLOGY: linear
289     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
291 TTGACACCAG ACCAACTGGT AATG                               24
```

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/938,114

DATE: 01/16/2002

TIME: 09:13:46

Input Set : N:\Crf3\RULE60\09938114.txt

Output Set: N:\CRF3\01162002\I938114.raw

L:44 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]  
L:45 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]  
L:327 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:328 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:329 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:331 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:332 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:333 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:335 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:336 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:337 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:339 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:340 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:341 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:343 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:344 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:345 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:347 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:348 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:349 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:351 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:352 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:353 M:259 W: Allowed number of lines exceeded, [OTHER INFORMATION:], SeqNo=12  
L:353 M:220 C: Keyword misspelled or invalid format, Poss data loss, Seq 12, (D) OTHER INFORMATION: